STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK REGULATIONS
TITLE 23, DIVISION 3, CHAPTER 16, CCR
AMENDMENTS FOR IMPLEMENTATION OF SB 989

TABLE OF SWRCB RESPONSE TO COMMENTS
45-Day Comment Period (May 12 – July 18)

COMMENTERS

NUMBER	NAME
1	Afforda Test
2	Bravo Systems
3	California CUPA Forum
4	CIOMA
5	Equiva Services LLC, SH&E Compliance
6	Environmental Working Group
7	Exxon Mobil
8	Harmon, Brian
9	L.A. County Dept. of Public Works
10	Mosier Brothers Storage Tanks
11	Orange County Health Care Agency
12	Pasadena Fire Department
13	Pearson Equipment & Maintenance Company
14	Rock, Dennis
15	Southern California Edison
16	SPC (Parent to Pacific Bell et al)
17	Steel Tank Institute
18	Time Oil Company
19	Tracer Research Corporation
20	Veeder-Root Company
21	Western State Petroleum Association
22	White Environmental Associates

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Section / subject	Comment Number	Summary of comment	Response	Revision needed
2611 / definitions	S9 - 04	Proposed definition of "dispenser" may include emergency generator underground tank systems (and non motor vehicle tank systems),	**Rejected:** the proposed definition of a "dispenser" is accurate and consistent with related statute. Although most emergency systems do not have "dispensers" some might, if so designed.	None
2611, 2636, 2626.1 to 4	L5 - 02	Recommends changing "spill containment or control system" to "dispenser spill containment or control system"	**Accepted**	Revised relevant sections
2635 / tank installer training	LS 3- 05	Supports the additional tank installer training as proposed	**Supporting comment**	None
2635 / tank installer training	L5 - 03	Recommends amending section 2635(d)(1) to include periodicity of re-certification.	**Accepted**	Revised 2635(d) accordingly
2635 / tank installer training	L5 - 04	The effective date for the initial refresher training for currently certified installers needs to be clarified	**Accepted**	Revised 2635(d) accordingly
2635 / tank installer training	S10 - 02	The proposed recurrent training requirement for tank installers (section 2635(d)(1)) is unnecessary	**Rejected:** periodic installer re-certification is needed to help ensure adequate competency in installing ust's properly.	None
2635 / tank installer training	S12 - 01	The proposed regulations are inadequate to address the quality of the tank installation and maintenance of these systems. Suggests that manufacturers training programs be monitored and approved by the swrcb	**Rejected:** swrcb does not have the statutory authority to require manufacturers to obtain approval from the swrcb for tank installation training programs	None
2635 / tank installer training	L18 - 04	The proposed requirement for triennial re-certification of tank installers is unnecessary (except possibly for inexperienced installers).	Same comment as S10 - 02	Same
2635 / tank installer training	L18 - 05	The proposed rule would benefit by requiring a single provider of this training for all or most ust systems	**Rejected:** the manufacturer of the equipment being installed is the best source of training for that equipment	None
2635 / tank installer training	LS21 - 12	The language for tank installer training should be revised to require that the refresher certification occur at least every 36 months	**Accepted**	Revised 2635(d) accordingly
2635 / tank installer training	LS21 - 15	Recommends that the language be revised to require that the refresher certification for tank installers occur at least every 36 months	**Accepted**	Revised 2635 accordingly

2635 / tank installer training	LS22 - 06	Commenter 22 says that the proposed additional requirements for tank installer training should cover all activities related to repairs and upgrades under article 6.	**Rejected:** with respect to ust repairs, this activity is covered by proposed section 2637(b); regarding ust upgrades, qualification requirements are already specified in article 4 for the various types of upgrades, including lining and installation of bladders.	None
2636 / under dispenser containment	S2 - 02	Requests clarification regarding under-dispenser containment and asks if float-trip valve will be acceptable.	**Clarification:** the float trip valve is acceptable if the systems meets the pertinent requirements of 2636(f) or (g).	Revised Section 2636 (f) and (g) accordingly.
2636 / under dispenser containment	LS3 - 03	Requests a requirement that monitoring of udc be done using an audible and visual alarm system, rather than simply by a float-trip mechanism.	**Rejected:** Our experience has been that audible and visual alarms are just as prone to failure due to lack of maintenance, or tampering, as are mechanical float switches	None
2636 / under dispenser containment	L7 - 03	The language in subdivision 2636(h)(3) appears to prevent installation of any dispenser spill containment or control system unless it has been specifically approved by the swrcb**.**	**Rejected: S**ubsection 2636(h)(3) specifically applies to dispenser spill containment or control systems that are separately defined in section 2611 from under-dispenser containment (UDC). Thus UDC systems may still be installed without SWRCB approval.	None
2636 / under dispenser containment	S14 - 02	The requirement for monitoring under-dispenser containment by an audible and visual alarm will be a huge burden to current owners of mechanical float switch systems	Same comment as S2 - 02	Same
2636 / under dispenser containment	LS15 - 01	The proposed regulations are not, but should be, drafted in consideration of nuclear power plants.	Not a comment on the proposed regulations	None
2636 / under dispenser containment	LS15 - 02	The proposed definition of “dispenser” should be clarified such that it may not be misinterpreted to include emergency generator fuel delivery systems	Same comment as S9 - 04	Same
2636 / under dispenser containment	S16 - 02	The underground storage tank systems that supply emergency generators don’t need under-dispenser containment.	Same comment as S9 - 04	Same
2636 / under dispenser containment	L18 - 02	The swrcb should allow flexibility when approving under-dispenser containment system.	**Rejected:** the requested flexibility is already incorporated into subdivisions 2636(h)(3) and 2636.1 through 4	None
2636 / under dispenser	LS21 - 04	The january 2000 date included in the proposed regulations for under dispenser containment seems	**Rejected:** under-dispenser containment has been required systems installed after july 1, 1987 per	None

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containment		at odds with current requirements and would be retroactive	health and safety code 25291(a)(7)(e), the new statutes simply clarify previous law.	
2636 / under dispenser containment	LS21 - 05	Under-dispenser monitoring systems that shut down the dispenser in the event of a leak should be allowed in lieu of monitoring by an audible and visual alarm	Same as comment S2 - 02	Same
2636 / under dispenser containment	LS21 - 06	the proposed requirement for approval by the swrcb of under-dispenser spill control or containment systems does not make allowance for third-party approval for acceptability	**Rejected:** the proposed regulations are clear regarding the two types of under-dispenser containment : 1) installed in accordance with proposed subsection 2636(h)(2); and 2) swrcb approved spill containment and control systems installed per proposed subsection 2636(h)(3).	None
2637 / secondary containment testing	L18 - 01	The requirements for secondary containment testing are too stringent since it is unlikely that both systems will fail simultaneously	**Rejected:** although the probability of the primary and secondary systems failing simultaneously is low, the probability of the secondary failing first, followed by the primary, is much higher.	None
2637 / annual maintenance Certification	L4 - 02	Proposed requirements will give manufacturers the ability to limit the number of contractors able to conduct the work.	**Rejected:** swrcb does not control how private firms do business. It is possible some manufacturers may limit certification of technicians, we have not heard of it to date.	None
2637 / annual maintenance certification	LS3 - 04	Supports the proposed regulations regarding annual monitoring maintenance inspector requirements.	**Supporting comment**	None
2637 / annual maintenance certification	S1 - 01	The new requirement for licensing of annual monitoring certification technicians is confusing, no apparent reason for it.	**Rejected**: the licensing requirements are mandated by law. The law was enacted in response to swrcb technical reports indicating deficient ust installations are causing leaks	None.
2637 / annual maintenance certification	S1 - 02	The licenses listed in the law and regulations are unrelated to the type of work conducted by service station annual maintenance technicians.	Not a comment on the proposed regulations.	None
2637 / annual maintenance certification	S1 - 04	Requests clarification as to whether the licensing requirements apply to the technician conducting the work or the contractor.	**Clarification:** the licensing requirements apply to persons responsible for the work. Employees of contractors holding a license do not personally need the license.	None.
2637 / annual maintenance certificaiton	L8 - 01	The Contractors state licensing board (cslb) has de-activated license c-61(d-40), one of the licenses listed as approved for annual monitoring maintenance inspectors.	Not a comment on the proposed regulations	None

2637 / annual maintenance certification	S1 - 03	The swrcb should request the contractors state licensing board (cslb) to provide a new license that is specific to annual monitoring maintenance work.	Not a comment on the regulations.	None
2637 / annual maintenance certification	S2 - 03	Requests clarification as to whether or not proposed requirements for annual monitoring maintenance inspectors applies to udc manufacturers	**Clarification:** health and safety code 25284.1(a)(4)(d) requires any person who installs, repairs, maintains, or calibrates monitoring equipment to be licensed and trained in accordance with swrcb regulations.	None
2637 / annual maintenance certification	L5 - 01	Section 2637(b)(1)(a) is not clear as to whether all of the licenses, or just one of the licenses, is required	**Clarification:** only one of the licenses is required. The swrcb believes that the current language is clear on this matter.	None
2637 / annual maintenance certification	L8 - 02	Commenter 8 believes it should be the company that is licensed to do the annual monitoring maintenance certifications, and not the employee., Otherwise could be a financial hardship for employees	Same as comment S1 - 04	None
2637 / annual maintenance certification	S9 - 03	Requests proposed regulations include a provision that allows the local agency to reset the schedule for the inspection so as to assure that staff will be present	**Rejected:** local agencies may request additional notification time if they believe it is necessary, without any additional provisions in the regulations.	None
2637 / annual maintenance certification	L13 - 01	Are certification programs offered by, or available from, all monitoring system manufacturers?	**Answer:** We believe that most manufacturers have training and certification programs related to the monitoring equipment they sell	None
2637 / annual maintenance certification	L13 - 02	Is January 1, 2002 the deadline by which the installer or maintenance technician must be certified?	**Answer:** January 1, 2002 is the date by which installation, calibration, maintenance, and annual certification of monitoring equipment must be done by a licensed and certified inspector	None
2637 / annual maintenance certification	L13 - 03	What about other related tank, piping, dispensing equipment manufacturers certification program availability?	**Answer:** Same answer as above	None
2637 / annual maintenance certification	L13 - 04	Some manufacturers of underground storage tank equipment will only train and certify certain select individuals or groups.	Same comment as L4 - 02	None
2637 / annual maintenance certification	LS21 - 13	The proposed requirement that owners/operators notify the local agency 48 hours in advance of conducting repairs should be revised to only require announcements for repairs that have already been scheduled	**Rejected:** providing a specific regulatory exemption for "scheduled repairs" would be ambiguous since owners or operators may classify almost any repair as unscheduled. Local agencies may waive requirement for emergency repairs	None

2637 / annual maintenance certification	LS21 - 14	The requirement for putting a tag or sticker on equipment that has been inspected should be replaced with a simpler tracking requirement	**Rejected:** we believe the tag/sticker method of tracking is reasonable and will at least show that the monitoring equipment was touched during the inspection.	None
2637 / annual maintenance certification	LS22 – 02	Recommends that leeway granted for the development, issuance and transfer to ust agencies of an electronic version of the "monitoring system certification form.	**Rejected:** the proposed regulations do not exclude the development, issuance, and transfer to ust agencies of an electronic version of the "monitoring system certification form."	None
2637 / secondary containment testing	LS21 - 02	Recommends that systems that cannot be tested but the owner/operator agrees to take the route of enhanced leak detection, the requirements should state that only one test is required	Same as comment L7 - 01	Same
2637 / secondary containment systems	LS17 - 02	Claims that monitorin methods that are exempt from periodic secondary containment systems rely on the owner/operator to regularly visually inspect equipment and there is no requirement for an alarm etc. To continuously detect leaks.	**Rejected:** Whether or not the monitoring method requires active participation by the owner or operator is moot provided that the monitoring system, including the necessary visual checks and the method of alarm, meets state requirements and has been approved by the local agency	None
2637 / secondary containment testing	S2 - 01	Clarify the type of periodic secondary containment testing that is acceptable to state and local agencies i.e. whether or not the test must be in accordance with the original manufacturers test or the test used at installation.	**Clarification:** the current proposed regulations require that secondary containment testing be conducted in accordance with manufacturer's guidelines and standards	None
2637 / secondary containment testing	LS3- 01	Supports proposed secondary containment testing requirements	**Supporting comment**	None
2637 / secondary containment testing	L7 - 01	The alternative to secondary containment testing (for systems not testable), identified in proposed subdivision 2637(a)(1) is unclear -- suggests another alternative.	**Accepted**	Revised 2637 with alternative similar to that suggested
2637 / secondary containment testing	L7 - 02	Subdivision 2637(a)(2) is inappropriately worded such that a local agency may decide to choose the secondary containment testing method	**Accepted**	Deleted the relevant provision

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2637 / secondary containment testing	S9 - 01	The requirement for secondary containment testing six months after installation is unnecessary	**Rejected:** settlement commonly occurs in soil and/or backfill which may affect the ust installation. Most settlement occurs in the first six months	None
2637 / secondary containment testing	S9 - 02	Under dispenser containment may not be testable because many flexible couplings, hose clamps, and other fittings are buried beneath the under dispenser containment	**Rejected:** While it is true that some, if not many, secondary containment systems may not be testable as currently installed, they can modified for testing. Additionally, this testing is mandated by law.	None
2637 / secondary containment testing	S10 - 01	the requirement for triennial secondary containment testing for double-walled tanks is unnecessary	**Rejected:** the proposed requirement is both necessary, because it is required by newly enacted statutes of SB 989, and consistent with existing statutes.	None
2637 / secondary containment testing	L11 - 01	Allowing local agencies to decide on a test method for secondary containment testing may create inconsistencies	Same as comment L7 - 02	See l7 - 02
2637 / secondary containment testing	S14 - 01	Will any type of sensor that recognizes the intrusion of ground water or product into the interstitial space allow an exemption for that system from secondary containment testing?	**Answer:** A system monitored by a probe that recognizes the intrusion of water would only be exempt if the entire tank was continuously submerged in ground water.	None
2637 / secondary containment testing	S16 - 01	Secondary containment testing of double-walled underground storage tanks may be problematic,	**Accepted:** we agree that post-installation testing of secondary containment systems will present unique problems that did not exist during the test at installation.	Revised 2637(a)(2) to allow more flexibility in test methods
2637 / secondary containment testing	LS17 - 01	Periodic testing of secondary containment systems for ust's already installed will likely entail a considerable cost without much benefit	**Rejected:** we agree that many systems will need costly modification, but the benefits of testing out weigh costs	None
2637 / secondary containment testing	LS21 - 01	Suggests that where an owner/operator commits to replacement of the non-testable secondary containment system by a certain date advance of july 2005, should be exempt from the testing requirement**.**	Same as comment L7 - 01	Same
2637 / secondary containment	LS21 - 03	Revise 3637 to clearly state that the local agency can only specify the method if manufacturers guidelines, industry codes, or engineering standards	Same as comment L7 – 02	Same

testing		do not exist.		
2640 / enhanced leak detection	L7 - 04	Requests that siphon bars be included in the list of components not considered "single-walled."	**Rejected:** siphon bars are considered suction piping, and suction piping has already been listed as exempt.	None
2640 / enhanced leak detection	S9 - 07	Unsure about the timing and the type of data that will go into the enhanced leak detection database, and the nature and extent of conveying information back to the swrcb.	Not a comment on the regulations	None
2640 / enhanced leak detection	L11 - 03	Subdivision 2640(e) is unclear as to where the measurement will be taken to determine if a single-walled tank facility is within 1000 ft of a public drinking water well.	**Accepted**	Revised 2640(e) to detail location of measurement
2640 / enhanced leak detection	LS21 - 08	Recommends that "siphon piping" be included in the list of components not considered single-walled components in subdivision 2640(e)(1)	Same as comment L7 – 04	Same
2644.1 / enhanced leak detection	LS3 - 02	The frequency of enhanced leak detection should be the same as the frequency for tank integrity testing for single-walled underground tanks.	**Rejected:** benefits of annual enhanced leak detection do not outweigh added costs given the proposed method.	None
2644.1 / enhanced leak detection	L7 - 05	Requests that a performance based standard be substituted for the "prescriptive" standard set forth in the proposed subdivision 2644.1(a)(1) and (2).	**Rejected:** the enhanced leak detection standard in subdivision 2644.1(a)(1) and (2) is a performance standard that was selected because, in addition to the high sensitivity available by this method, it is also capable of finding the location of a leak	None
2644.1 / enhanced leak detection	S9 - 05	Because the enhanced leak detection method identified in the proposed regulations is proprietary, and takes place over several days, it is difficult for local agencies to verify the what is going on during the test	**Rejected:** workplans must be submitted to, and approved by, local agencies. Although some aspects are proprietary, those aspects are included in third party certification. Local agency can still follow crux of the test.	None
2644.1 / enhanced leak detection	S9 - 06	Asserts that, even though vent piping, and other components, are exempt from enhanced leak detection, they cannot be isolated thus causing false testing results.	**Rejected:** although unregulated vent piping and other components cannot be isolated from the ust system, the proposed enhanced leak detection method can detect leaks from these areas via probes near these components.	None
2644.1 / enhanced leak detection	S9 - 08	Expressed concern that the proposed method of enhanced leak detection could only be provided by one vendor and that there is no protocol for this method for the proposed 0.05 leak rate.	**Rejected:** see comments L20 – 01 and L7 – 05.	None

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2644.1 / enhanced leak detection	L18 - 03	The swrcb should reconsider using tracers to meet the enhanced leak detection requirement because they are unreliable	**Rejected:** the provisions set forth in subdivision 2644.1(a)(2) ensure the reliability of the proposed method for enhanced leak detection	None
2644.1 / enhanced leak detection	L19 - 01	Since the lowest sensitivity for the proposed enhnaced leak detection method is 0.005 gallons per hour, the leak should be reduced to this sensitivity	**Accepted**	Revised 2644.1 to change leak rate to .005
2644.1 / enhanced leak detection	L20 - 01	Swrcb should consider giving owners and operators of underground storage tanks several options for enhanced leak detection	**Rejected:** the enhanced leak detection standard set forth in subdivision 2644.1(a)(1) and (2) was selected as best after evaluation of several other methods	None
2644.1 / enhanced leak detection	LS21 - 09	It is inappropriate for the state to impose any sort of requirement that can only be conducted by a single contractor.	Same as comment L20 - 01	Same
2644.1 / enhanced leak detection	LS21 - 10	The experience gained in doing field based research should be able to determine effectiveness of tracer method, the swrcb should delay mandating this method until results are in	**Rejected:** the investigative method being used for the field-based research is based on the known reliability and accuracy of that method at ust sites around the country	None
2644.1 / enhanced leak detection	LS21 - 11	A triennial frequency for enhanced leak detection is not unreasonable and that should be made clear in the proposed regulations	**Accepted**	Revised 2644.1 to require triennial testing
2644.1 / enhanced leak detection	LS21 - 16	A provision should be added to allow replacement of single walled components to obviate the need for testing	**Rejected:** replacement of single-walled components can be done without any new provisions being added to the regulations.	None
2644.1 / enhanced leak detection	LS22 - 03	Commenter 22 says the swrcb's reasoning in establishing the 0.05 leak detection rate for enhanced leak detection may be flawed.	**Rejected:** There are good reasons in seeking data obtained with a leak rate sensitivity lower than current routine monitoring, most important of which is to determine if UST's are leaking below the leak rate of the routine monitoring method..	None
2644.1 / enhanced leak detection	LS22 - 04	Expressed significant concern the proposed requirement for enhanced leak detection can only be met by one method, and perhaps one vendor.	Same as comment L20 - 01	None
2644.1 / enhanced leak detection	LS22 - 05	the swrcb did not require that enhanced leak detection be conducted periodically. Enhanced leak detection should be required no less than every 3 years between events.	Same as comment LS21 - 11	Same
None	LS22 - 07	Comments regarding local agency enforcement	Not comments on regulations	

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None	LS 3- 06	Comments regarding underground storage tank facility inspection requirements	Not a comment on the regulations	None
None	L6 - 01	Submitted report entitled "*uncontrolled lusts: how california fails to protect our water from leaking underground storage tanks"* as comments	Not a comment on the regulations	None
None	L11 - 02	Fill pipes and vent/vapor lines should also be required to be secondarily contained for newly constructed systems.	Not a comment on the regulations.	None
None	L11 - 04	Comments regarding annual inspection requirements.	**Rejected:** not comments on the proposed regulations	None
None	LS21 - 07	Since the dates identified in subdivisions 2666(a)(b) and (c)(december 22, 1998) are behind us, the wording of these regulations should be expressed differently.	Not a comment on the proposed regulations	None
None	LS22 - 01	General comments	**Rejected:** not comments on proposed regulations	None
None / general comments	L4 - 01	Timing of the proposed regulations poses an unnecessary and costly burden to small business tank owners	**Rejected:** the regulations could not have been adopted prior to technical information that supported legislation	None